

NEW PLANT RECORDS FROM RAJASTHAN, INDIA

P. J. PARMAR

Botanical Survey of India, Jodhpur

ABSTRACT

The present communication deals with 7 species which are new to the flora of Rajasthan.

INTRODUCTION

There are several publications dealing with the flora of different regions of Rajasthan. Blatter and Hallberg (1918-21), Puri *et al.* (1964), and more recently Bhandari (1978) have dealt with the flora of the Rajasthan desert lying to the west of Aravallies. Duthie's (1903-29) *Flora of the Upper Gangetic Plain* covers parts of eastern and south-eastern Rajasthan. The flora of Kota division in south-eastern Rajasthan has been studied by Majumdar (1973 & 1979), Maheshwari and Singh (1979) and Singh and Pandey (1981). Sharma and Tiagi (1979) published the flora of N. E. Rajasthan. Several other publications pertaining to the flora of Rajasthan have been reviewed by Jain (1972), Shetty and Pandey (1979) and Sharma (1980).

While working on the plants of Rajasthan, the author has come across a few plants which are additions to the flora of Rajasthan; these are recorded in the present paper. The exsiccate are present in BSJO.

ENUMERATION

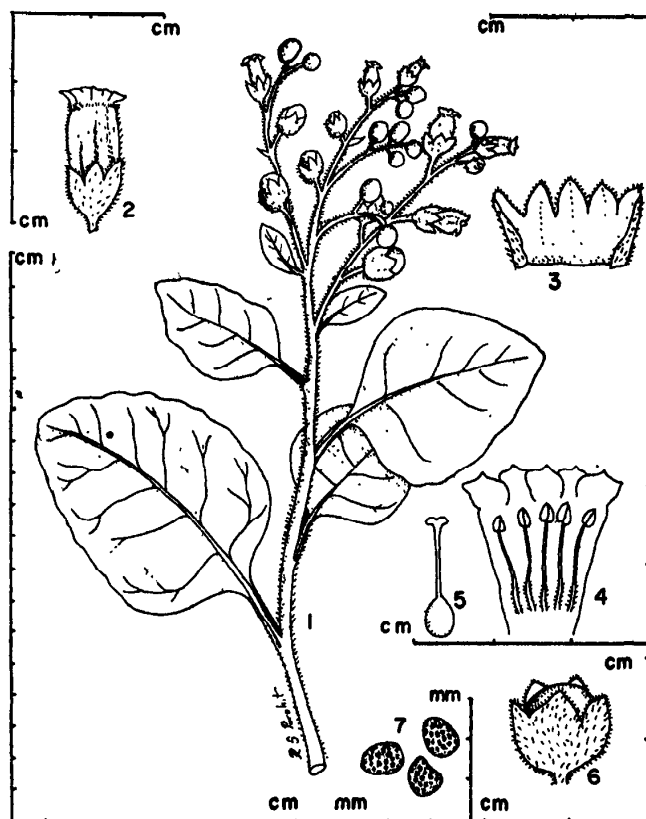
SOLANACEAE

***Nicotiana rustica* L. Sp. Pl. 180. 1753 ;**
Hook. f. Fl. Brit. India 4 : 245. 1884.

Erect, viscidly glandular, annual or perennial herbs with thick, pubescent stem and slender branches. Leaves 10-20 × 5-10 cm,

ovate-oblong to rounded, narrowed into a winged petiole, obtuse or rounded, subentire-sinuate, glandular, nearly glabrous. Flowers in dense, glandular-pubescent, cymose panicles. Calyx divided half-way down ; lobes obtuse or subacute. Fruits 0.7-1.5 cm across, globose-ovoid. Seeds 0.07-0.1 cm long (Figs. 1-7).

Probably a native of Central and South



Nicotiana rustica L.

Figs. 1-7: 1. Habit. 2. Flower. 3. Calyx. 4. Corolla split open. 5. Gynoecium. 6. Fruit. 7. Seed.

America. Common in waste places in Churu district.

Specimen examined : Khasolia, along Dungargarh road, Churu, 260 m, 22.11.1976, Roy 4017.

Fl. & Fr. : Oct.-Dec.

Physalis micrantha Link, Enum. hort. Berol. alt. 1 : 181. 1821 ; Heine, Fl. West. Trop. Afr. ed. 2. 2 : 329. 1963 ; Raizada, Suppl. Duthie's Fl. Gangetic plain 172. 1976.

Erect, more or less prostrate, simple or branched, annual herbs. Stem angular-ribbed, nearly glabrous. Leaves 1.5-6.0 × 1.3-4.0 cm, ovate, with rounded or cuneate base, acute or acuminate, entire-sinuate to dentate, glabrous. Flowers solitary, terminal, seemingly axillary, nodding. Pedicels short-hairy, 0.4-0.5 cm long during anthesis, up to 1 cm long in fruiting. Calyx c. 0.3 cm long, hairy ; lobes triangular, acute. Corolla 0.4-0.5 cm long, pale yellow. Filaments hairy at base ; anthers yellow. Fruiting

calyx c. 1.5 cm long, bladder-like, glabrous (Figs. 1-7).

Probably a native of tropical Africa. Common in waste places at Amarpura, Bhilwara district.

Specimen examined : Amarpura, Bhilwara, 19.9.1978, A. N. Singh 6219.

Fl. & Fr. : Aug.-Nov.

ASTERACEAE

Launaea capitata (Spreng.) Dandy in F.W. Andrews, Flow. Plants Sudan 3 : 40. 1956. *Sonchus capitatus* Spreng. Syst. Veg. ed. 16. 3 : 650. 1826. *Launaea glomerata* Hook. f. Fl. Brit. India 3 : 417. 1881.

Annual suberect herbs. Heads yellow. Involucre bracts 3-seriate, outer very broad, all with membranous margins. Achenes winged.

Common in sandy soil near Paliwali, Ganganagar district.

Specimen examined : Paliwali, Ganganagar, 300 m, 2.3.1978, Roy 5950.

Fl. & Fr. : Feb.-Apr.

CYPERACEAE

Eleocharis dulcis (Burm. f.) Henschel, Vita Rumphii 186. 1933 ; Kern in Reinwardtia 6 : 36. 1961. *Andropogon dulce* Burm. f. Fl. Indica 219. 1768. *Eleocharis plantaginea* (Retz.) R. Br. Prodr. 224. 1810 ; Clarke in Hook. f. Fl. Brit. India 6 : 625. 1893 ; Duthie, Fl. Gangetic plain 3 : 348. 1929.

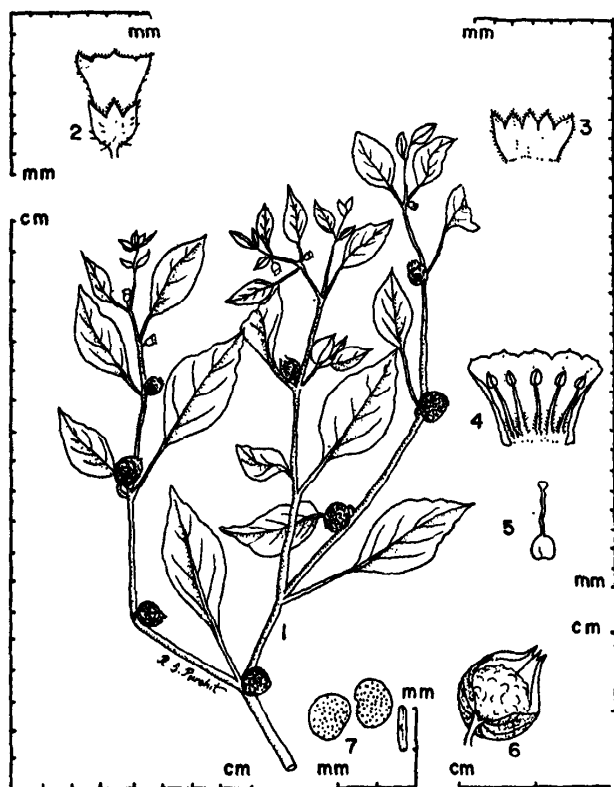
Tufted, perennial sedges. Leaves O. Spikelets solitary, terminal, cylindric, straw-coloured. Hypogynous bristles 7, retrorsely scabrid, as long as the nut. Nut pale yellowish brown, orbicular-obovate, biconvex, tipped with persistent style base.

Native of Paleotropics. Rare at Jahajpura, Bhilwara district.

Specimen examined : Jahajpura, Bhilwara, 4.10.1978, A. N. Singh 5723.

Fl. & Fr. : Sept.-Nov.

Scleria parvula Steud. Synop. Pl. Glum. 2 : 174. 1855. *S. tessellata* auct. non Willd. 1805 ; Clarke in Hook. f. Fl. Brit.



Physalis micrantha Link.

Figs. 1-7 : 1. Habit. 2. Flower. 3. Calyx. 4. Corolla split open. 5. Gynoecium. 6. Fruit. 7. Seed.

India 6 : 686. 1893, *p.p.* ; Duthie, Fl. Gangetic plain 3 : 367. 1929.

Tufted, perennial sedges with small rhizomes. Leaves linear. Inflorescence a terminal or sub-terminal, branched, leafy panicle. Nut nearly sessile, oblong-ellipsoid, chalk-white, tessellately cancellate.

Rare, in moist black soil at Bijolian, Bhilwara district.

Specimen examined : Bijolian, Bhilwara, 1.10.1978, A. N. Singh 5073.

Fl. & Fr. : Sept.-Nov.

POACEAE

Cynodon barberi Rang. & Tad. in J. Bombay nat. Hist. Soc. 24 : 846. 1916 ; Fischer in Gamble, Fl. Madras 3 : 1836. 1934 ; Bor, Grass. Burm. Ceyl. Ind. Pak. 469. 1960.

Perennials, without rhizomatous underground branches. Lemma equal to or shorter or slightly longer than the upper glume, hairy, hairs clavellate.

Common weed in waste places at Vallabh garden, Bikaner.

This species has hitherto been considered as "endemic to Madaras" (Bor, *l.c.*).

Specimen examined : Vallabh garden, Bikaner, 213 m, 6.12.1975, Roy 2435.

Fl. & Fr. : Oct.-Jan.

Paspalum orbiculare Forst., Fl. Ins. Austr. 7. 1786 ; Fischer in Gamble, Fl. Madras 3 : 1772. 1934 ; Bor, Grass. Burm. Ceyl. Ind. Pak. 340. 1960.

Perennials. Spikelets more than 1.75 mm long. Upper glume 3-nerved, the lateral nerves double.

Species of Indo-malaysian region. Com-

mon on the way to Khari dam, Bhilwara district.

Specimen examined : On the way to Khari dam, Bhilwara, 22.9.1978, A. N. Singh 6511.

Fl. & Fr. : Sept.-Dec.

ACKNOWLEDGEMENTS

The author is thankful to the Director, Botanical Survey of India, Howrah, for providing facilities, to the Deputy Director, Arid Zone Circle, Botanical Survey of India, Jodhpur, for going through the manuscript, and also to Mr. Paramjit Singh, for help in preparation of illustrations.

REFERENCES

- BHANDARI, M. M. Flora of the Indian desert. Scientific Publishers, Jodhpur. 1978.
- BLATTER, E. AND F. HALLBERG. The flora of the Indian desert (Jodhpur and Jaisalmer). *Journ Bombay nat. Hist. Soc.* 26 : 218-246, 525-551, 811-818, 968-987 ; 27 : 40-47, 270-279, 506-519. 1918-1921.
- DUTHIE, J. F. Flora of the Upper Gangetic Plain and of the adjacent Siwalick and sub-Himalayan tracts. Calcutta. 1903-1929.
- JAIN, S. K. Floral composition of Rajasthan—A review. *Bull. bot. Surv. India* 12 : 176-187. 1970 (1972).
- MAHESHWARI, J. K. AND V. SINGH. Supplement to the synoptic flora of Kota division (S. E. Rajasthan). *Ibid.* 18 : 155-160. 1976 (1979).
- MAJUMDAR, R. B. Synoptic flora of the Kota division (S. E. Rajasthan). *Ibid.* 13 : 105-146. 1971 (1973) ; 18 : 49-79. 1976 (1979).
- PURI, G. S. ET AL. Flora of Rajasthan. *Rec. Bot. Surv. India* 19 : 1-159. 1964.
- SHARMA, S. AND B. TIAGI. Flora of North-east Rajasthan. Kalyani Publishers, New Delhi. 1979.
- SHARMA, S. Floristic studies in Rajasthan—In retrospect and prospect. *Journ. Econ. Tax. bot.* 1 : 55-75. 1980.
- SHETTY, B. V. AND R. P. PANDEY. Studies on the flora of Rajasthan desert—A review. *Bull. bot. Surv. India* 19 : 5-22. 1977 (1979).
- SINGH, V. AND R. P. PANDEY. Supplement to the synoptic flora of Kota division (S. E. Rajasthan)-II. *Ibid.* 21 : 91-96. 1979 (1981).